

# ANNUAL WATER QUALITY REPORT 2014

## Water Testing Performed in 2013



In 2013, the City of Gainesville Public Utilities Department conducted over 2,600 laboratory tests for more than 100 drinking water parameters. This report includes information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Your public utilities department is committed to providing the community with clean, safe, and reliable drinking water. The tables below list all the drinking water contaminants that we detected during the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2013. EPD requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

Microbiological Contaminants Table						
Parameter	MCL	MCLG	Gainesville Water System	Violation	Typical Source of Contaminant	
Total Coliform Bacteria	No more than 5% of monthly samples can test positive for coliform bacteria	0	0.9% (Highest Monthly Positives)	NO	Naturally present in the environment	

  

Disinfectants Table						
Parameter	MRDL	MRDLG	Gainesville Water System	Range of Violation	Typical Source of Contaminant	
Chlorine (ppm)	4.0	4.0	1.48	0 – 2.00	NO	Water additive used to control microbes

  

Inorganic Contaminants Table						
Parameter	MCL	MCLG	Gainesville Water System	Range of Violation	Typical Source of Contaminant	
Fluoride (ppm)	4.0	4.0	.87	0.71 – 1.01	NO	Water additive which promotes strong teeth
Nitrate/Nitrite (ppm)	10	10	0.28	0.24 – 0.32	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

  

Organic Contaminants Table						
Parameter	MCL	MCLG	Gainesville Water System	Range of Violation	Typical Source of Contaminant	
Total Trihalomethanes (TTHMs) (ppb)	80	n/a	0.066*	0.029 – 0.058	NO	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60	n/a	0.024*	0.018 – 0.026	NO	By-product of drinking water disinfection
Chlorite (ppm)	1	0.8	0.197	0.076 – 0.390	NO	By-product of drinking water chlorination
Total Organic Carbon (TOC) (ppm)	TT	n/a	.98	0.66 – 1.3	NO	Naturally present in the environment

\* This number represents the highest locational running annual averages reported during 2013.

  

Lead and Copper Contaminant Table						
Parameter	AL	MCLG	90 <sup>th</sup> percentile value	# of sites above the AL	Typical Source of Contaminant	
Copper (ppm)	1.3	1.3	0.053	No (0) sites above the AL out of 50 sites sampled.	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
Lead (ppb)	15	0	0.0025	No (0) sites above the AL out of 50 sites sampled.	Corrosion of household plumbing systems; Erosion of natural deposits	

2012 Data, No Sampling Required For This Reporting Period

  

Turbidity Table						
Parameter	MCL	MCLG	Result	Range of Violation	Typical Source of Contaminant	
Turbidity (NTU)	TT = <0.3	0	0.053	0.01 – 0.36	NO	Soil runoff and erosion
Turbidity (NTU)	TT = percentage of samples <0.3 NTU	n/a	100%	n/a	NO	

Turbidity is a measure of the cloudiness of water. We monitor turbidity to indicate the effectiveness of our filtration system.

  

Unregulated Contaminants Table						
Parameter	MCL	MCLG	Gainesville Water System	Range of Violation	Typical Source of Contaminant	
Chloroform (ppb)	n/a	n/a	7.65	3.8 – 6.7	NO	By-product of drinking water chlorination process
Dichlorobromomethane (ppb)	n/a	n/a	2.7	2.4 – 2.9	NO	By-product of drinking water chlorination process
Chlorodibromomethane (ppb)	n/a	n/a	.99	1.1 – 5.1	NO	By-product of drinking water chlorination process
Monochloroacetic Acid (ppb)	n/a	n/a	0	0 – 0	NO	By-product of drinking water chlorination process

### Contaminants that may be present in source water-before “TREATMENT” include:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Microbial contaminants**, such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants** such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

### Terms & Abbreviations used below:

**Action Level (AL):** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Environmental Protection Agency (EPA):** the United States Environmental Protection Agency.

**Environmental Protection Division (EPD):** the Georgia Department of Natural Resources Environmental Protection Division.

**Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Treatment Technique (TT):** a required process intended to reduce the level of a contaminant in drinking water. **n/a:** not applicable – **nd:** not detectable at testing limit – **ppb:** parts per billion or micrograms per liter – **ppm:** parts per million or milligrams per liter – **NTU:** nephelometric turbidity units, measurement of suspended material in water.

Some people may be more vulnerable to contaminants in drinking water than the general population.



Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline: (1-800- 426-4791).





# ANNUAL WATER QUALITY REPORT 2014



The Gainesville Public Utilities Department provides water to residential, commercial and industrial customers located within the Gainesville corporate limits, a large portion of unincorporated Hall County and within the corporate limits of the cities of Clermont, Buford, Oakwood, Braselton, Flowery Branch and Gillsville. The Gainesville service area covers approximately 500 square miles. The water system serves a customer base of approximately 48,479 accounts with an estimated 153,000+ users. We welcome your comments and participation on issues that concern our drinking water. Kelly Randall, Director of Public Utilities, may be reached at (770) 538-2400. Don Dye, Assistant Director of Public Utilities, may be reached at (770) 538-2462.

The information contained in this report summarizes your drinking water for calendar year 2013. This information is provided on or before June 1. If you are interested in getting more information about your water quality or this report, please call Horace Gee, Environmental Services Administrator at (770) 532-7462.

The City of Gainesville Public Utilities Department is actively involved in protection of our local water resources and works with various state, federal and local agencies on Watershed Protection issues. In 2003, our community completed a source water assessment. The overall point source susceptibility ratings for both of Gainesville's plants are low.

## Water Efficiency

**Conservation or wise use is a general practice all should do. Gainesville is committed to assisting water customers in achieving this goal.**

### Are you a water savvy saver? Test your knowledge.

1. True/False. The toilet uses the most water in the home on a daily basis.
2. True/False. Approximately 4 million people get their drinking water from Lake Sydney Lanier/Chattahoochee River.
3. True/False. Water demands from City of Gainesville customers have increased the last 5 years.
4. True/False. Sprinkler heads never move and do not have to be adjusted. They always water in the same areas.

*\*Answers are located in answer portion below the stormwater management section.*

#### 1. Education

- a. Classroom Presentations, workshops, Facebook and the use of TV-18 are avenues Gainesville uses for awareness. Gainesville's dynamic duo of the Conservation Crusader and Lola the Water Waster would love to speak with you.

#### 2. Tools

- a. Rainwater collection via our rain barrel program, water assessments and providing other resources to decrease water usage.
- b. Take advantage of the Residential and/or Commercial Plumbing Retrofit Program. Call for more details or learn more on the web at: <http://www.gainesville.org/fullpanel/uploads/files/rebate-application-sf-het-2-2012.pdf>
- c. Georgia has an outdoor watering schedule we must follow. Check the Gainesville website for current water-use schedules at: <http://www.gainesville.org/fullpanel/uploads/files/outdoor-water-use.pdf>



### Find those water savings

- Dye toilet tanks for leaks.
- Don't overwater your lawn.
- Drippy water fixtures add up.
- Shorter showers.

For more tips, visit us at [www.gainesville.org](http://www.gainesville.org) or call 770-532-7462.

## Stormwater Management

Gainesville has over 15,000 stormwater structures and 170 miles of storm water pipes within the city limits. Routine inspection and maintaining stormwater structures are part of this program. Non-point source pollution is a main contributor of water pollution. The City of Gainesville's Stormwater Management Program entails: public education/involvement opportunities, erosion and sedimentation control procedures and pollution prevention awareness.



### Test your stormwater knowledge!

5. True/False: Its ok to pollute down a storm drain because the city treats the stormwater?
6. True/False: Green Infrastructure and natural conservation is an effective treatment for stormwater pollution?
7. True/False: You can't over fertilize your lawn?

Find us on Facebook. Like us by searching: [Gainesville Water Resources](#)

**Answers:** (1) True! Almost 24% of the water used on a daily basis is from the toilet. Showers are 2<sup>nd</sup> at approximately 17%. (2) True! Nearly 4 million people receive their water from this supply. Our population is expected to increase over the next 15 years. Wise use will continue to part of everyday use. (3) False! Water usage has decreased over the last 5 years. Demands from customers at one time were over 20 million gallons per day (mgd). Water usage now is near an average of 18.2 mgd. (4) False! Sprinkler heads need to be checked to make sure they are not broken and have not turned to water the roadway or pavement areas. Using wisely keeps your lawn healthy and helps lower your bill. Don't overwater. (5) False! We only treat wastewater (sewage). Untreated stormwater (rain) travels through stormdrains directly into creeks and Lake Lanier. Anything you toss out or leave out enters the storm system and into surface water. (6) True! The more pervious or porous areas you have, the less runoff can occur. It allows time for soil to filter out some particles from entering streams and lakes. (7) False! Excess fertilizer runs off lawns polluting streams. Always follow the application directions